

Environment- An all Pervasive Pulsating Phenomenon

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Abstract

Environment is everything that promotes, individually and collectively, health and happiness amongst all forms of life on this planet Earth. Since man is the highest evolved creature on the Earth, it is his prime duty as well as responsibility to keep this phenomenon performing. The Earth provides enough to satisfy man's every need, but not for anybody's greed.

In this context, the Agenda 21 of the Rio Declaration (June 1992) on Environment and development in a comprehensive blue print for global action in all areas of sustainable development.

Yet, the status of Environment can be seen from the southern California's Big bear Solar observatory that as seen from space, the Earth is growing dimmer as it warms. Further, according to the research sponsored in part by the NASA and published in the current issue of Geophysical Research letters, the earth has dimmed by about 2.5 percent over the last five years. The Earth's brightness – known as Earth shine – is thus an important gauge of the health and happiness prevailing on this planet

Key Words: *Earth Shine, Interconnectedness*

Concept

The German scientist Earnest Heckle is responsible for the beginning of serious thinking in the field of Ecology. He propounded that there is a mutual relationship between all forms of life on this planet Earth, and all things lifeless that exist on this Earth. Any external factor, substance or condition that affects an organism in any way is known as a factor. The sum of all such factors constitutes "Environment". It thus becomes indeed a complex of so many factors, better referred to as the environmental complex (Sharma 1996)

The term "Environment" etymologically refers to surrounding's. It is generally used for this abstract concept. So says the Webster Comprehensive Dictionary. Encyclopedic Edition 1997- "Ones surrounding or circumstances collectively.

An environment is a complex of so many factors that interact not only with the organisms, but also amongst themselves. As a result it is difficult to isolate any one part of the environment and change it without affecting the other part of the environment. To concretize the concept, Bilgirmi *et al* 1995 elaborates further that environmental components may be as follows, which may be classified among physical and biological.

Physical factors

Energy, radiation, temperature and heat flow, water, atmospheric, topography, geological substratum, soil.

Biological factors

Green plants, Non-green plants, Decomposers, Parasites, Symbionts, Animals, Man.

The mother, nature has unique equilibrium amongst all such factors. It is the same principle that operates in the space. Each astral body is an individual yet they live collectively in harmony. The disturbance in the equilibrium

and is the harmony would hazard innumerable as well as inconceivable consequences as we have started witnessing on earth.

Threat

Roughly fifty thousand years ago, man first learnt to make fire. He acquired the art as well as science of agriculture nearby ten thousand years ago. Then during last two to three centuries ago. Industrial Revolution brought serious changes in the life style of man., and then the medical science gifted valuable drugs and therapy. Nuclear science brought revolutionary changes and slowly and slowly the world is tending towards a global village. The civilization is progressing and is growing to progress further, as if all these would not be enough.

But marching a head does not necessarily unfolds that man has conquered all his problems. On the other hand, he is slowly disturbing the equilibrium. The gifts of science and technology to us are also concealing the seeds of calamity and destruction for this planet.

To take an example: Nuclear establishments the world over claim that underground tests pose no risks to the health of the organisms and environmental balance. But Mr. M.V. Ramana- Research Associate at the center for Energy and Environmental studies, Princeton University U.S.A., who has analysed the data of underground tests including that of Pokharan 1979, has found that the long terms affect of underground tests are more likely to arise from the immense quantities of radio-active materials, much of it have very long life, left below the ground, which would lead to contamination of water.

Test sites are located in desert. In Pokharan, water is a precious commodity. The underground tests conducted deep in the desert (1998 sites) are at Lathi series Formation containing accumulated Fossil water(Thar-Nature's gift: Ishwar Prakash, Survey of Environment 1999). The radiation traveling down below could contaminate water. With the Indira Gandhi coral system, the contaminated water could mix with the percolating water, and this affect vegetation, which is fed to the cattle. In this way it could enter the food cycle through milk. This is another example of interconnectedness in the environment. Further, underground tests send waves of tremor for long distance below the earth's surface. The recent earthquakes may have been caused by them in Gujrat and in other states. The data are being analysed.

Another example is threat to greenery caused by the greed of man. During our father's time, it took probably more than a decade to finish cutting all the trees in a forest; and during this period the regeneration used to cover the forest floor, and new saplings as well as coppice shoots were establishing themselves. To elaborate, if a man with the help of an axe wanted to cut all the trees in a forest, the size of a football ground, it would take about a year. But, if he uses an electric saw, he can finish it more quickly. With more sophisticated machines, he alone can cut the same forest in an hour, arrange them properly and take home; he has only to sit and press the buttons of the machine. As a result, there is little or no scope of regeneration coming up to cover the forest floor thus evacuated; and thousands of species (plant and animal) get truncated, reduced fragmented or even eradicated.

Simply, stated bio-diversity comes in danger. But, Bio-diversity is life on earth comprising the ecosystems, ecological processes and wealth of species that inhabit our Earth. It is our natural resources base as well as our biological capital in the global bank. Without it, we would not endure as a species; for biodiversity loss is an irreversible process.

Loss of greenery has yet another impact on our planet. The emission of greenhouse gases, such as carbon dioxide, is leading to the global warming. The green plants have shrunk in area to recycle this into oxygen. Other green house gases are methane, nitrous oxide and water vapour, being produced as a result of Industrial Revolution. However, Carbon dioxide is the most important green house gas that is being affected by human activities.

The internal Governmental Panel on Climatic change (I.P.C.C.) concluded in its second assessment in 1995 that under the present scenarios of economic growth and global deforestation leading to green house gas emission, on a world wide average, temperature would rise by 1 to 3.5^oc by the year 2100 and global mean sea-level by about 15 to 95cm. Indeed for many low lying and deltaic areas and small islands, a sea level rise by 100 cm. could threaten complete loss of land and extinction of habitation. (Climate change- Anand Patwardhan: Survey of Environment 1999). So it is about water- deluge (Jal Pralay) as described in our Scripts.

As a result of this warming of the Earth it is looking dimmer as seen from the space. (According to study released recently at Southern California's Big Bear Solar Observatory). New observation suggest that the Earth has dimmed by about 2.5 percent over the past five years, according to research sponsored by NASA and published in current issue of Geophysical Research Letters. If more observations confirm that trend, the earth's brightness – Known as Earth shine – could provide an important gauge on the health of the global climate.

Loss of greenery has another dimension in the shape of unprecedented floods, silting of dams and recent earthquakes in the Himalayan region.

Thus, the pulsating environment is the hazard on various counts. Yet, there is a silver lining that an awareness has come, as may be seen from various seminars and conferences on the subject at national and international levels including the present one. There, the malady is discussed by the scientists and thinkers (sages) and remedy is suggested.

Remedy

On 22nd December 1990, United Nations General Assembly called for a global meeting to decide strategies to halt and reverse the effects of environmental degradation. Further, the United Nations Conference on Environment and Development discussed the subject in a comprehensive manner through various agenda. The Agenda 21 is a comprehensive program of actions to be implemented by Governments, development agencies, United Nations Organisations, and independent sector groups in every area where human activity affects environment. These programs shall be implemented in conjunction with the sustainable management of forests. These were adapted at the conference – Known as Earth Summit- held from 3rd to 14th June, 1992 in Rio de Janeiro, Brazil.

The underlying concept in Agenda 21 is that the humanity has reached a momentous moment in its destiny. We can continue with our present policies, which are causing continued deterioration of the ecosystem on which we depend for life on the Earth; and, further, which are causing to deepen the economic divisions within and between the countries resulting in hunger, sickness, poverty and illiteracy world over. Or, we can change the course to better management and protection of ecosystem and to improve the living standards of those who are in need, so as to ensure a prosperous future for all organisms on this planet Earth.

There is no need here to project the different tenets of Agenda 21. The complete text of this can be found in document ACONF 151/ 26, Vol. I and II and has been issued as U.N. Sales publication. Different nations including India are committed to follow the remedies suggested there in with the economic and technical assistance of different U. N. agencies.

Conclusion

To day, we seem to forget that great interconnectedness of philosophy and physics. There is above all a crisis of perception, and destruction of all norms that are the basis of a meaningful life. Norms like "energy crisis", "environment crisis", "population crisis", "biodiversity crisis", are routinely expounded. Slowly, the general concept of life is being eroded as we forget the oneness of existence and our role in cosmos.

The agenda 21 points that every discipline is connected with other forms of Art and none could be understood without this comprehension. This awareness of the inter-relationship of all existence is to be nurtured when science and mathematics are taught in schools; not through religion, but through quantum physics. The latter tells us that scientifically all atoms of the universe are interconnected. We, being an integral part of that wholeness, so that we may learn to live together in peace and harmony.

Nevertheless, in the context of the vast multitude of Indian continent, every thing, every action and interaction is grossly connected to the political will of its people. And the Environment is not included in the agenda of political parties. Unless this is included all efforts for course correction will not be translated into action.

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